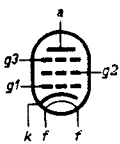
PHILIPS UF 85

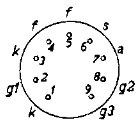
R.F. PENTODE with variable mutual conductance for use as I.F. amplifier in A.M. receivers and as R.F. or I.F. amplifier in F.M. receivers or broadband amplifiers
PENTHODE H.F. à pente variable pour utilisation en amplificatrice M.F. dans des récepteurs A.M. et en amplificatrice H.F. ou M.F. dans des récepteurs F.M. ou des amplificateurs à large bande
H.F.PENTODE mit veränderlicher Steilheit zur Verwendung als ZF-Verstärker in AM-Empfängern und als HF- oder ZF-Verstärker in FM-Empfängern oder Breitbandverstärkern

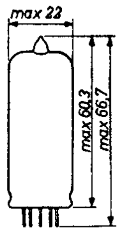
Heating : indirect by A.C. or D.C. series supply
Chauffage: indirect par C.A. ou C.C. alimentation en série
Heizung : indirekt durch Wechsel- oder Gleichstrom; Serienspeisung

V_f = 19 V
I_f = 100 mA

Dimensions in mm
Dimensions en mm
Abmessungen in mm







Base, culot, Sockel: NOVAL

Capacitances
Capacités
Kapazitäten

C_a	=	3,7 pF
C_{g1}	=	7,2 pF
C_{ag1}	<	0,007 pF
C_{g1f}	<	0,15 pF

PHILIPS UF 85

R.F..PENTODE with variable mutual conductance for use as I.F. amplifier in A.M. receivers and as R.F. or I.F. amplifier in F.M. receivers or broadband amplifiers

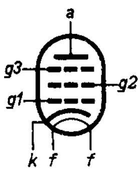
PENTHODE H.F. à pente variable pour utilisation en amplificatrice M.F. dans des récepteurs A.M. et en amplificatrice H.F. ou M.F. dans des récepteurs F.M. ou des amplificateurs à large bande

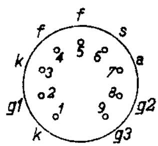
H.F.PENTODE mit veränderlicher Steilheit zur Verwendung als ZF-Verstärker in AM-Empfängern und als HF- oder ZF-Verstärker in FM-Empfängern oder Breitbandverstärkern

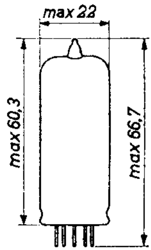
Heating : indirect by A.C. or D.C. series supply
Chauffage: indirect par C.A. ou C.C. alimentation en série
Heizung : indirekt durch Wechsel- oder Gleichstrom; Serienspeisung

V_f = 19 V
I_f = 100 mA

Dimensions in mm
Dimensions en mm
Abmessungen in mm







Base, culot, Sockel: NOVAL

Capacitances
Capacités
Kapazitäten

C_a	=	3,2 pF
C_{g1}	=	6,9 pF
C_{ag1}	<	0,007 pF
C_{g1f}	<	0,15 pF

11.11.1954

UF 85 PHILIPS

Operating characteristics for use as R.F. or I.F. amplifier
Caractéristiques d'utilisation en amplificatrice H.F. ou M.F.
Betriebsdaten als HF- oder ZF-Verstärker

$V_a=V_b$ =	100		170		200		V
V_{g3} =	0		0		0		V
R_{g2} =	27		27		27		kΩ
R_k =	160		160		160		Ω
V_{g1} =	-1,1	-14	-2	-24	-2,3	-28	V
V_{g2} =	58	-	100	-	116	-	V
I_a =	5,5	-	9,7	-	11,4	-	mA
I_{g2} =	1,6	-	2,6	-	3,1	-	mA
S =	4900	49	5800	58	6100	61	µA/V
R_i =	0,15	>5	0,2	>5	0,2	>5	MΩ
R_{eq} =	1,1	-	1,4	-	1,5	-	kΩ
r_{g1} [1]) =	1,4	-	1,8	-	2	-	kΩ

Limiting values
Caractéristiques limites
Grenzdaten

V_{a_o}	= max.	550	V
V_a	= max.	250	V
W_a	= max.	2,5	W
V_{g2_o}	= max.	550	V
V_{g2}	= max.	250	V
W_{g2}	= max.	0,65	W
I_k	= max.	15	mA
V_{g1} (I_{g1}=+0,3µA)	= max.	-1,3	V
R_{g1}	= max.	3	MΩ [2])
R_{kf}	= max.	20	kΩ
V_{kf}	= max.	150	V

[1]) Input resistance at 100 Mc/s
Résistance d'entrée à 100 Mc/s
Eingangswiderstand bei 100 MHz

[2]) When the tube is used at or near maximum ratings it is advisable to take the value of R_{g1} as low as possible.
Si le tube est utilisé aux ou presqu'aux valeurs limites il est recommandé de choisir une valeur de R_{g1} aussi petite que possible.
Wenn die Röhre bei oder fast bei den Grenzdaten verwendet wird, wird es empfohlen einen möglichst niedrigen Wert von R_{g1} zu wählen.

UF 85 PHILIPS

Operating characteristics for use as R.F. or I.F. amplifier
Caractéristiques d'utilisation en amplificatrice H.F. ou M.F.
Betriebsdaten als HF- oder ZF-Verstärker

$V_a = V_b$ =	100		170		200		V
V_{g3} =	0		0		0		V
R_{g2} =	27		27		27		kΩ
V_{g1} =	-1,1	-14	-2	-24	-2,3	-28	V
V_{g2} =	57	-	100	-	116	-	V
I_a =	5,5	-	9,7	-	11,4	-	mA
I_{g2} =	1,6	-	2,6	-	3,1	-	mA
S =	5000	50	5900	59	6100	61	µA/V
R_i =	0,25	> 5	0,3	> 5	0,35	> 5	MΩ
R_{eq} =	1,1	-	1,4	-	1,5	-	kΩ
r_{g1} [1]) =	5,6	-	7,6	-	8	-	kΩ

Limiting values
Caractéristiques limites
Grenzdaten

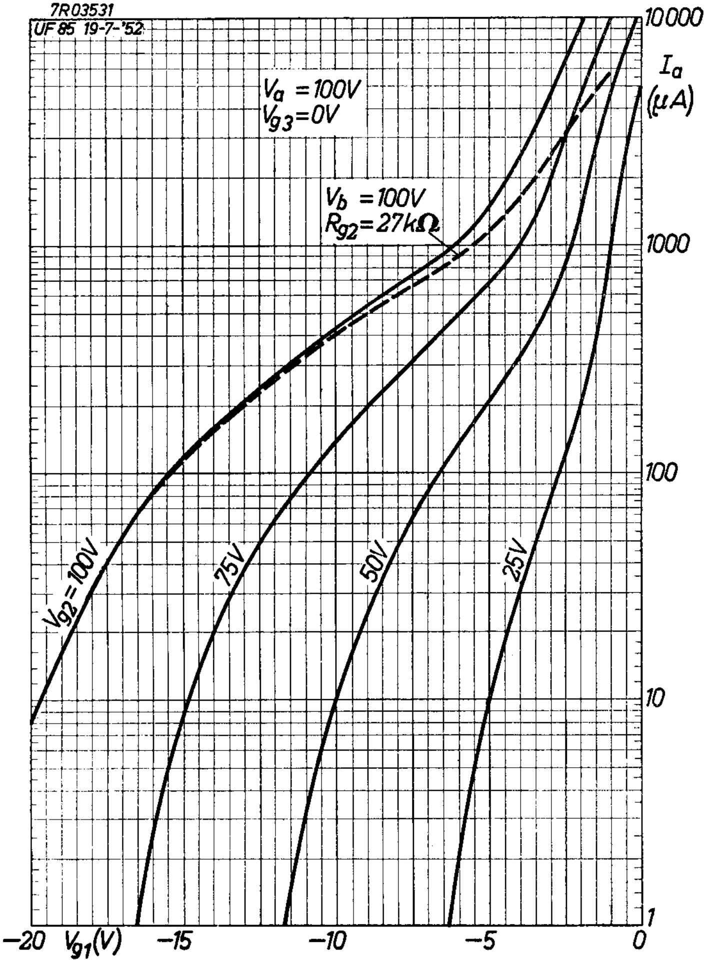
V_{a_o}	= max.	550	V
V_a	= max.	250	V
W_a	= max.	2,5	W
V_{g2_o}	= max.	550	V
V_{g2}	= max.	250	V
W_{g2}	= max.	0,65	W
I_k	= max.	15	mA
$-V_{g1}$ (I_{g1}=+0,3µA)	= max.	1,3	V
R_{g1}	= max.	3	MΩ[2])
R_{kf}	= max.	20	kΩ
V_{kf}	= max.	150	V

[1]) f = 50 Mc/s

[2]) When the tube is used at or near maximum ratings it is advisable to take the value of R_{g1} as low as possible.
Si le tube est utilisé aux ou presqu'aux valeurs limites il est recommandé de choisir une valeur de R_{g1} aussi petite que possible.
Wenn die Röhre bei oder fast bei den Grenzdaten verwendet wird, wird es empfohlen einen möglichst niedrigen Wert von R_{g1} zu wählen.

PHILIPS

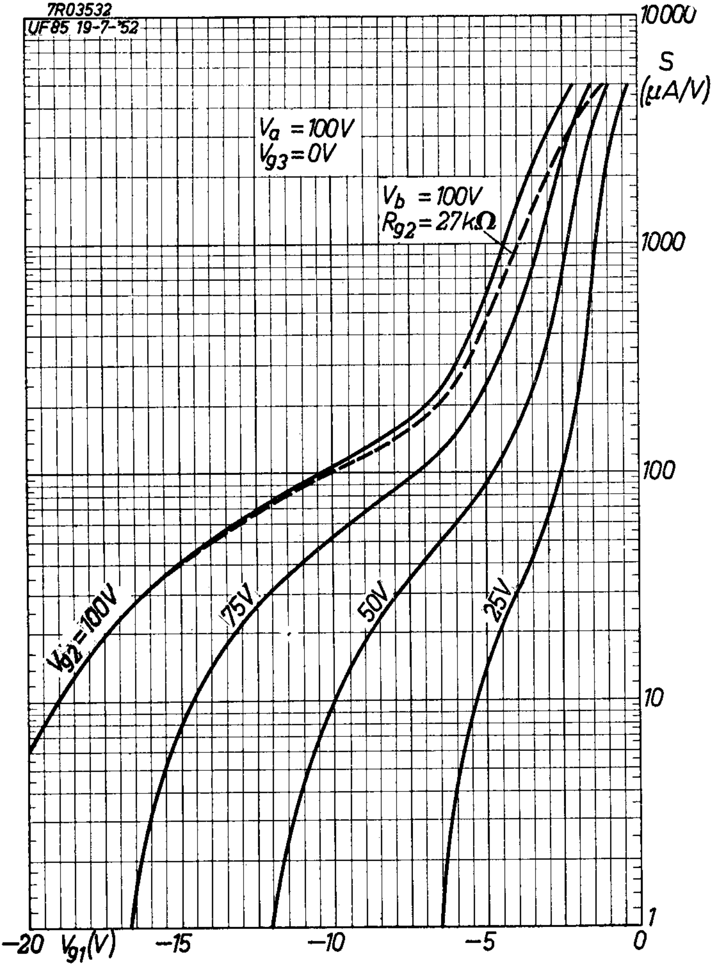
UF 85



8.8.1952

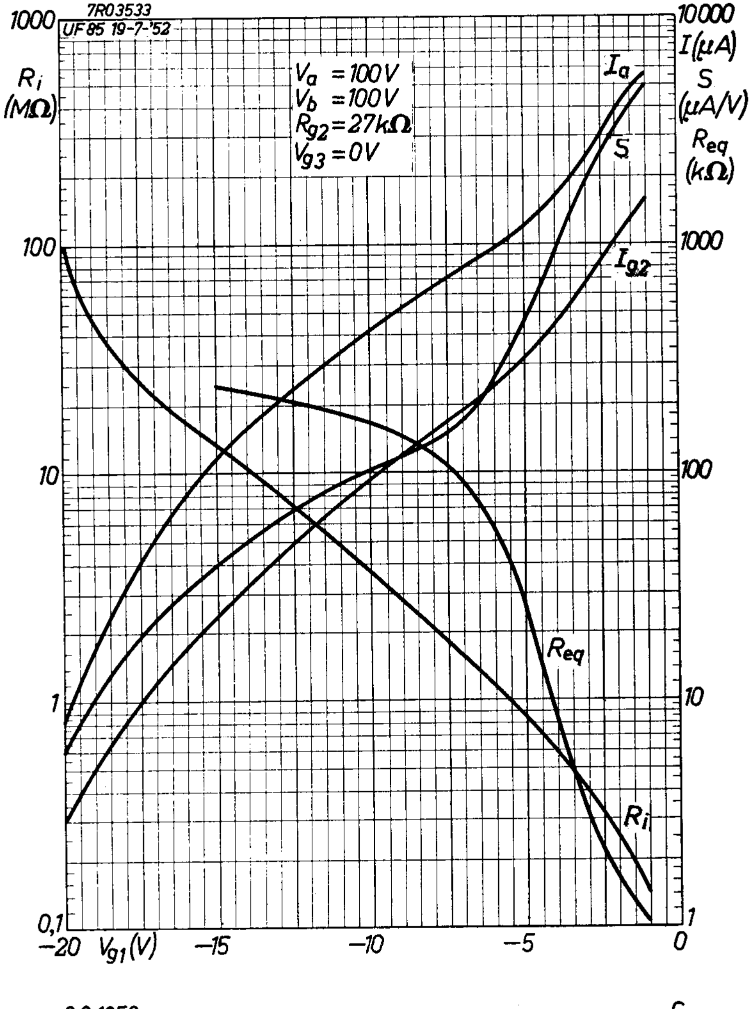
A

UF 85 PHILIPS



B

"Miniwatt" **UF85**

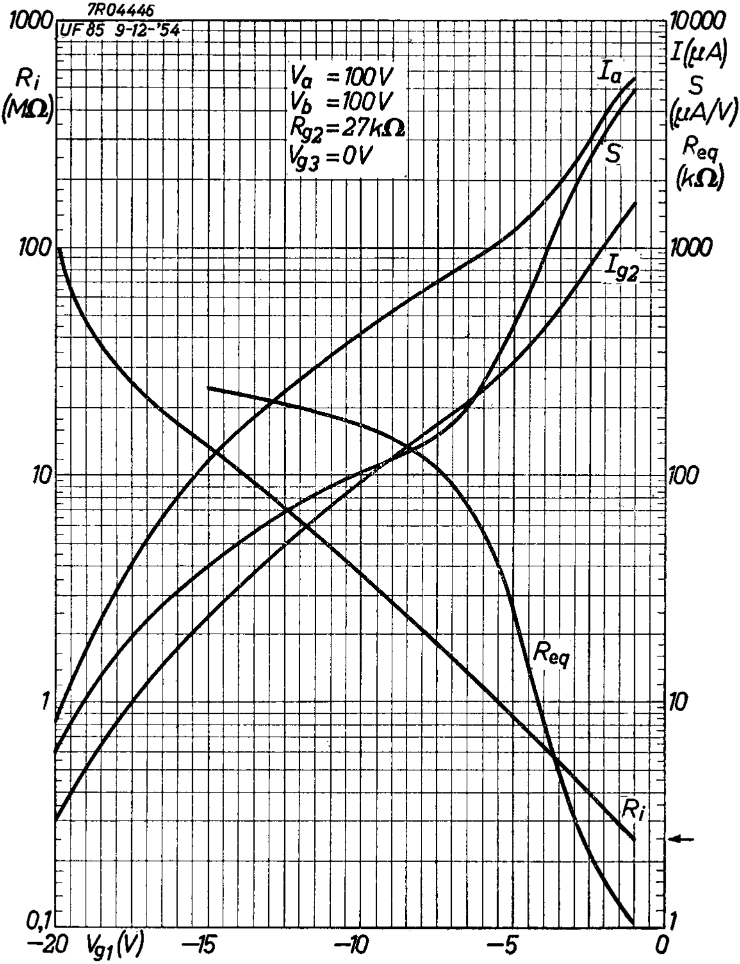


8.8.1952

C

PHILIPS

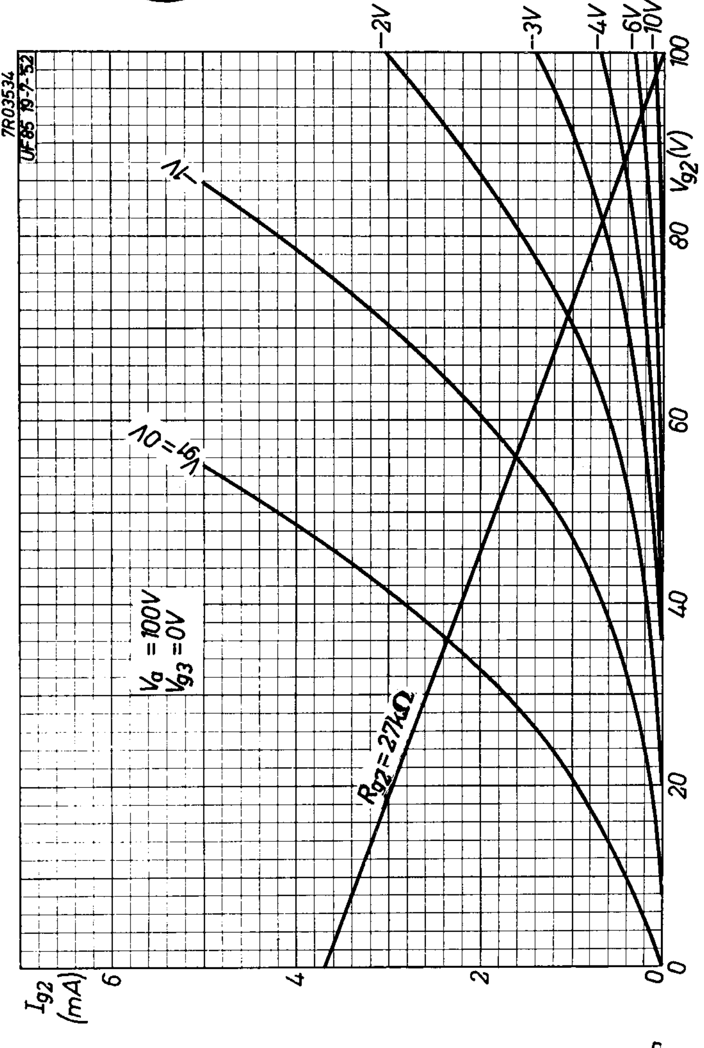
UF 85



12.12.1954

C

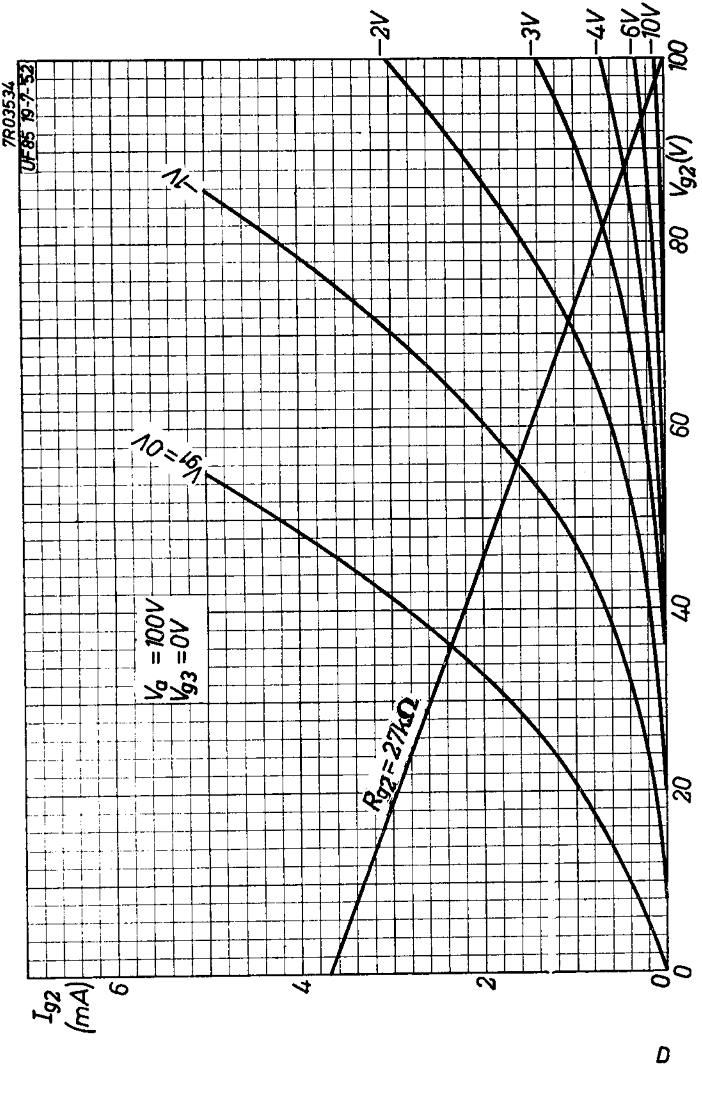
UF85 "Miniwatt"



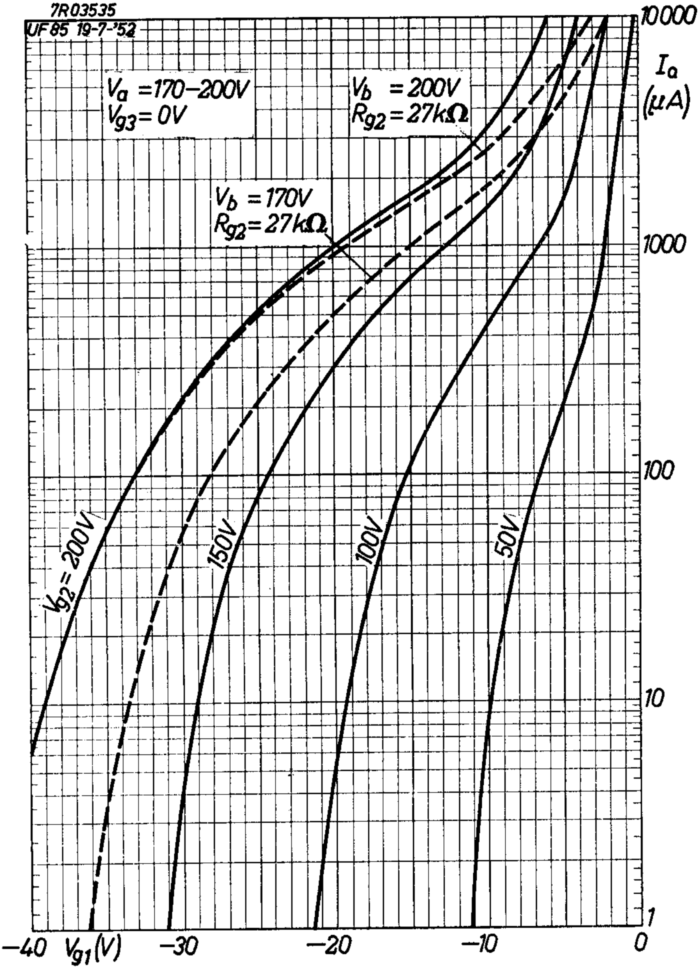
D

UF85

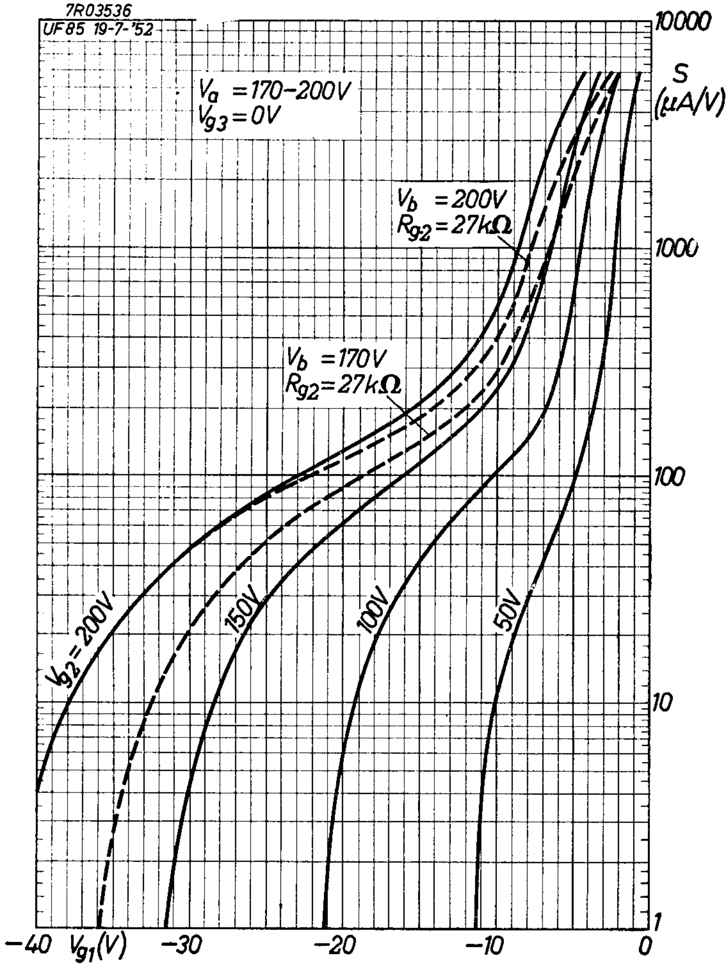
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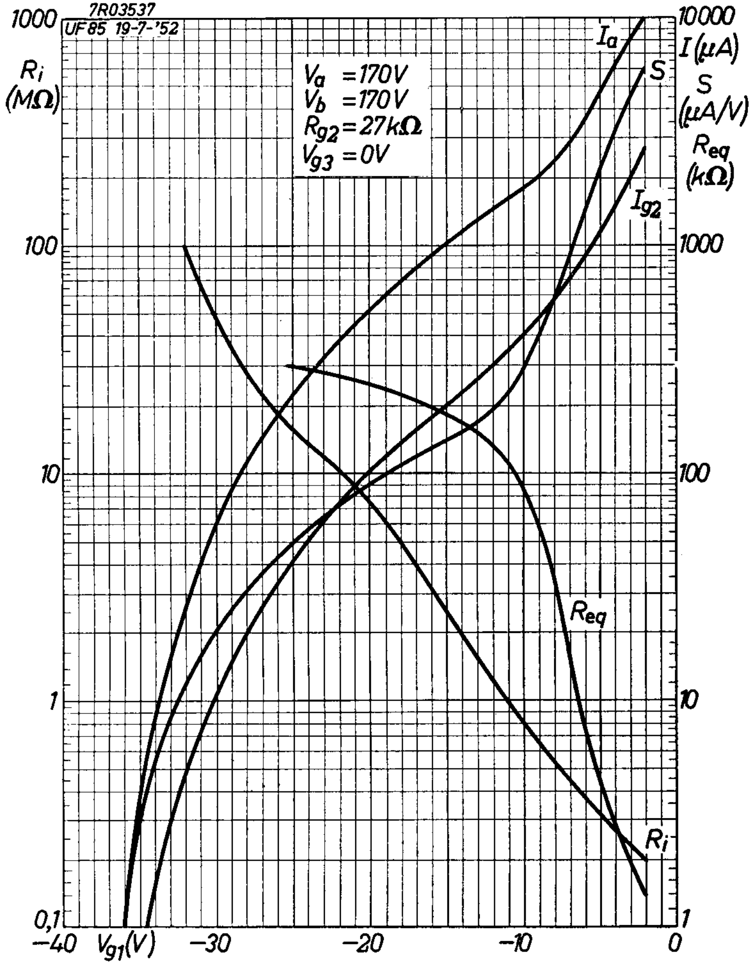


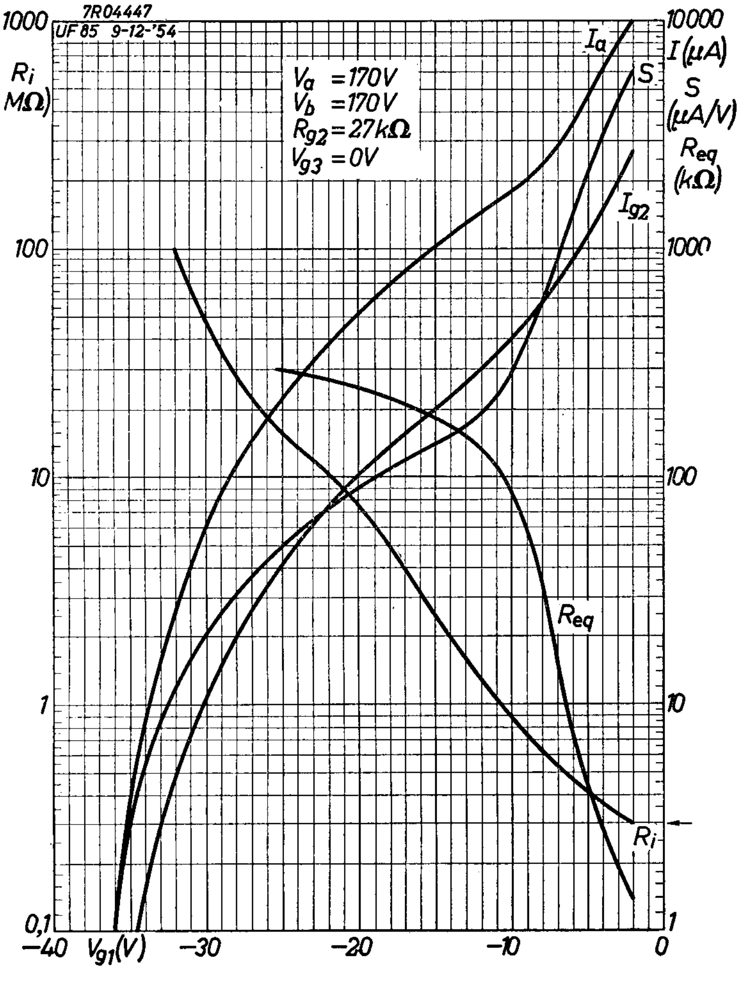
D


7R03535
UF 85 19-7-'52
V_a = 170–200V
V_{g3} = 0V
V_b = 200V
R_{g2} = 27kΩ
V_b = 170V
R_{g2} = 27kΩ
V_{g2} = 200V
150V
100V
50V
I_a (μA)
10000
1000
100
10
1
−40
V_{g1}(V)
−30
−20
−10
0

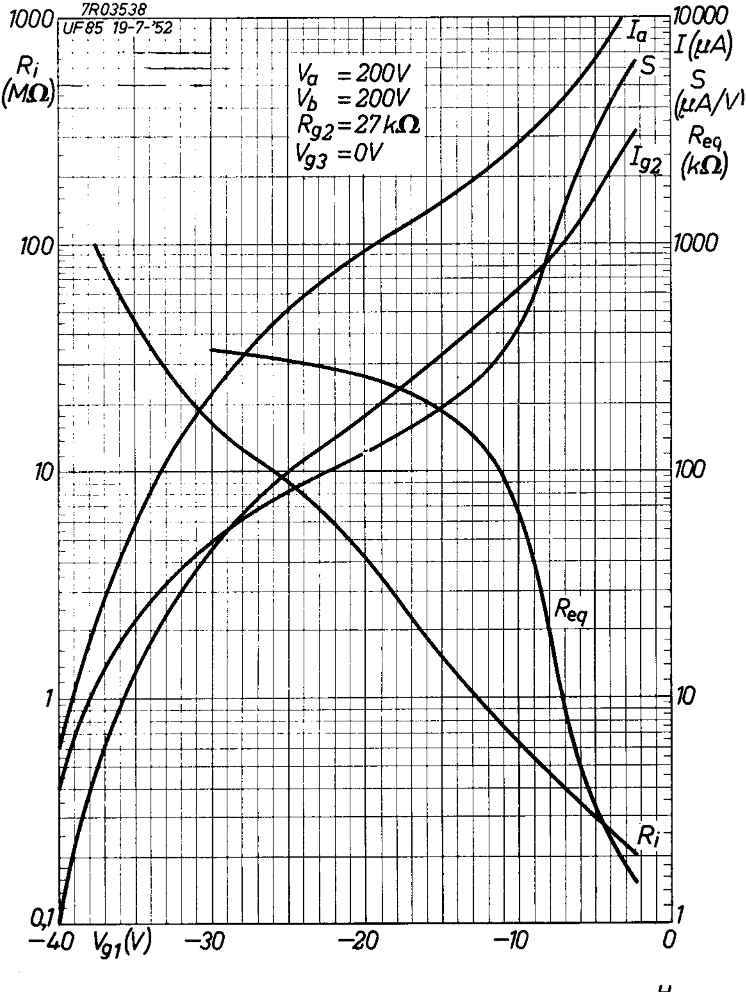
PHILIPS


7R03536
UF85 19-7-'52
V_a =170-200V
V_{g3}=0V
V_b =200V
R_{g2}=27kΩ
V_b =170V
R_{g2}=27kΩ
V_{g2}=200V
150V
100V
50V
S (μA/V)
10000
1000
100
10
1
−40
V_{g1}(V)
−30
−20
−10
0


7R03537
UF85 19-7-'52
V_a = 170V
V_b = 170V
R_{g2} = 27kΩ
V_{g3} = 0V
R_i
(MΩ)
1000
100
10
1
0,1
10000
I (μA)
S
(μA/V)
R_{eq}
(kΩ)
1000
100
10
1
I_a
S
I_{g2}
R_{eq}
R_i
−40
V_{g1}(V)
−30
−20
−10
0


7R04447
UF 85 9-12-'54
1000
R_i
$M\Omega$)
100
10
1
0,1
10000
I (μA)
S
(μA/V)
R_{eq}
(kΩ)
1000
100
10
1
V_a =170V
V_b =170V
R_{g2}=27kΩ
V_{g3} =0V
I_a
S
I_{g2}
R_{eq}
R_i
−40
V_{g1}(V)
−30
−20
−10
0

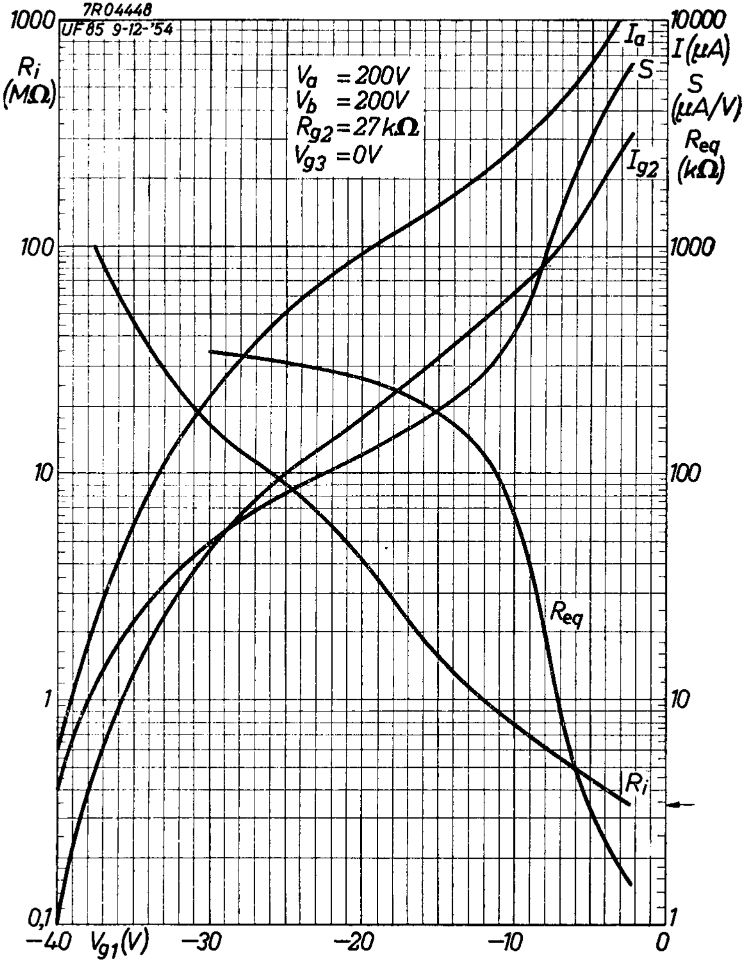
UF85 "Miniwatt"



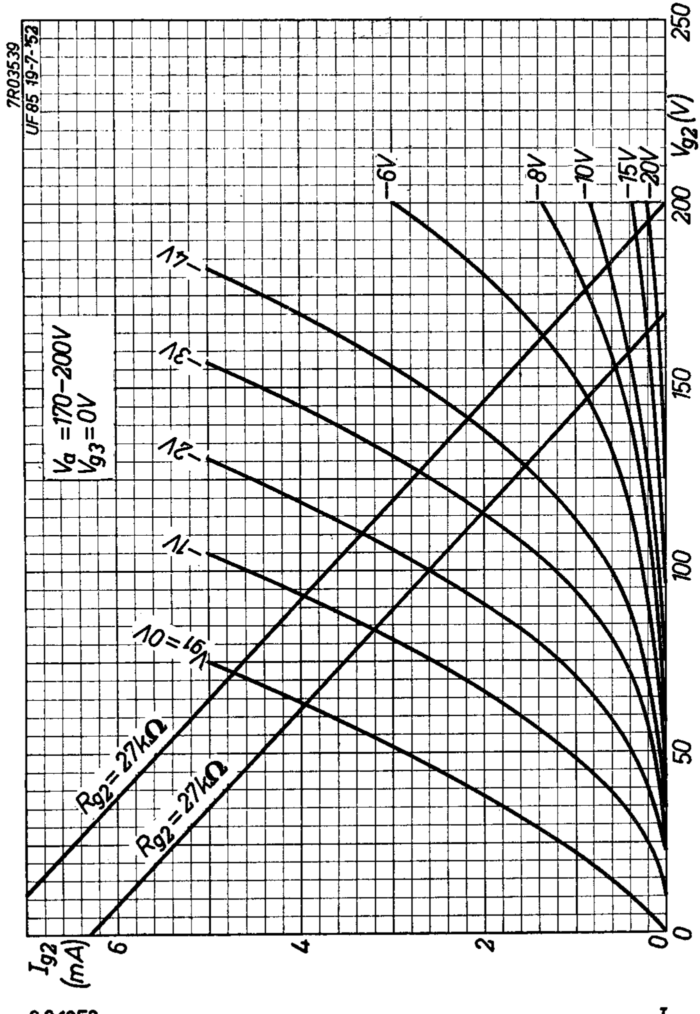
H

UF85

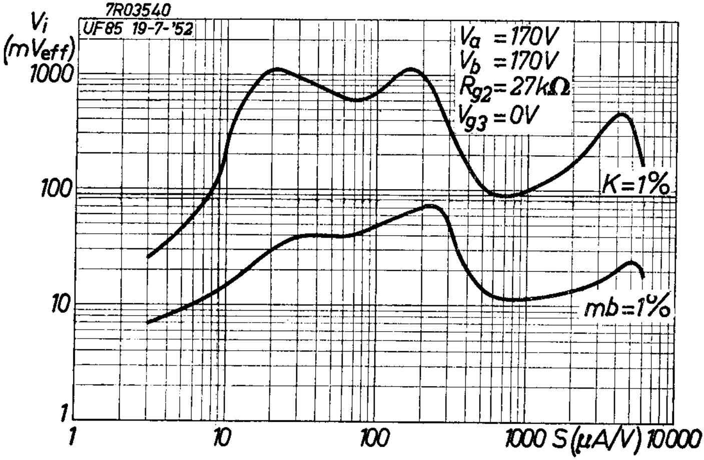
PHILIPS

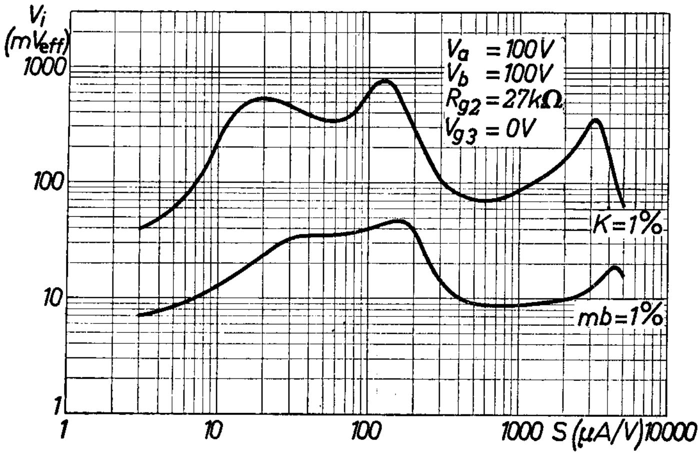


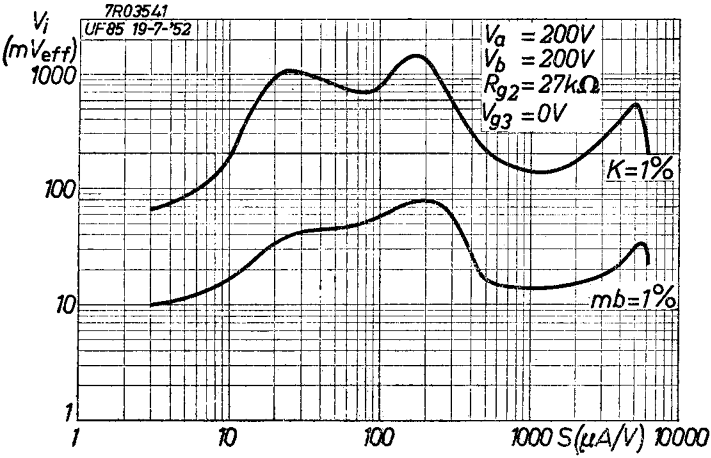
H


7R03539
UF85 19-7-'52
V_a = 170–200V
V_{g3} = 0V
V_{g1} = 0V
−1V
−2V
−3V
−4V
−6V
−8V
−10V
−15V
−20V
R_{g2} = 27kΩ
R_{g2} = 27kΩ
V_{g2} (V)
0
50
100
150
200
250
I_{g2} (mA)
0
2
4
6

UF85 **PHILIPS**






7R03541
UF 85 19-7-'52
V_i (mV_{eff})
1000
100
10
1
1
10
100
1000 S(μA/V) 10000
V_a = 200V
V_b = 200V
R_{g2} = 27kΩ
V_{g3} = 0V
K=1%
mb=1%

PHILIPS

Electronic Tube

HANDBOOK

UF85

page	sheet	date
1	1	1954.04.04
2	1	1954.11.11
3	2	1954.04.04
4	2	1954.11.11
5	A	1952.08.08
6	B	1952.08.08
7	C	1952.08.08
8	C	1954.12.12
9	D	1952.08.08
10	D	1954.12.12
11	E	1952.08.08
12	F	1952.08.08
13	G	1952.08.08
14	G	1954.12.12
15	H	1952.08.08
16	H	1954.12.12
17	I	1952.08.08
18	J	1952.08.08
19	K	1952.08.08